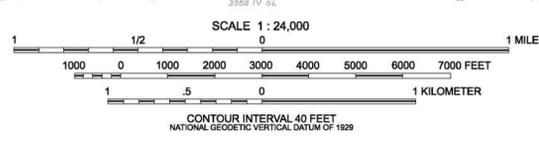
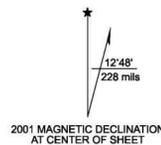


Base map from U.S. Geological Survey
Podunk Creek 7.5' Quadrangle, 1966

The Miscellaneous Publication Maps provide an outlet for authors who are not Utah Geological Survey staff. Not all aspects of this publication may conform to UGS style and content standards.



Field mapping in 1972 - 1975,
1989 and 1992
Lori J. Douglas, Cartographer

**GEOLOGIC MAP OF THE PODUNK CREEK
QUADRANGLE, KANE COUNTY, UTAH**

by
Terry L. Tilton
2001

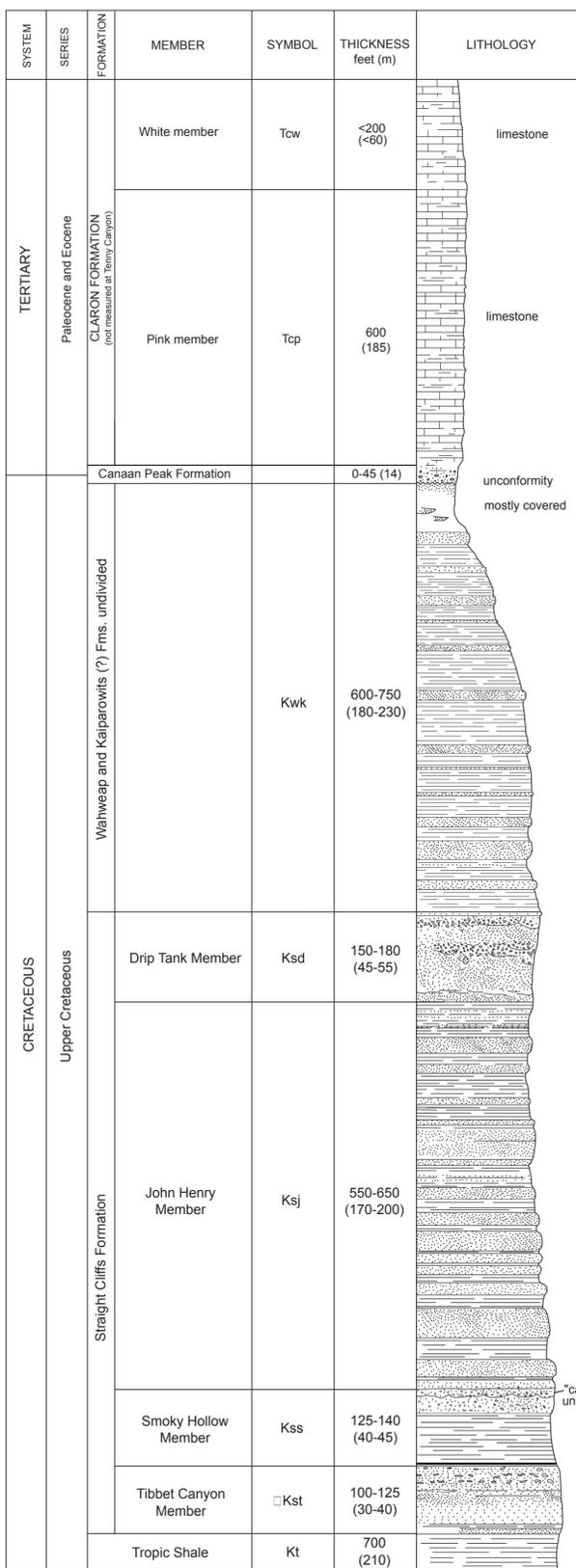
Description of Map Units

- Qa** Alluvium - Includes stream and fan alluvium and terrace deposits of unconsolidated clay, silt, sand, and gravel in and near existing drainages. On top of and adjacent to the plateau these deposits are predominantly sand and gravel. Away from the plateau these deposits are mostly mud where streams cut the Tropic Shale. Thin cover to about 10 feet (3 m) thick.
- Qms** Landslide deposits - Unconsolidated hummocky deposits of mud and sand, commonly containing large blocks of sandstone. The bulk of the material is from the Straight Cliffs Formation moving down onto areas underlain by Tropic Shale. Individual landslides are separated by dashed contact lines. Thin cover to about 100 feet (30 m) thick.
- Qm** Mass-wasting debris - Predominantly resistant white and pink limestone from the Claron Formation and cobbly gravel from the Canaan Peak Formation. Thin cover to about 10 feet (3 m) thick.
- Qap** Pediment alluvium - Poorly sorted silt, sand, and gravel (up to small cobbles) on broad surfaces above present drainages. Formed by deposition from flowing water in past; surfaces now abandoned. Thin cover to about 10 feet (3 m) thick.
- Qb** Basalt - Mass of fine-grained porphyritic olivine basalt locally known as Black Knoll. Various igneous textures including rough columnar jointing, scoria, glassy zones, and mixed highly vesicular and denser rock. Exposures of flow are up to 100 feet (30 m) thick.
- Tcw** White member of Claron Formation - Massive, white to light-gray limestone, with some local thin interbeds of gray mudstone. Forms conspicuous cap on higher hills on top of plateau. About 200 feet (60 m) thick.
- Tcp** Pink member of the Claron Formation - Interbedded cliff-forming sequence of dense pink limestone, and minor limy mudstone and calcarenite. Includes local conglomerates of the Canaan Peak Formation, up to 45 feet thick, at the base. About 600 feet (180 m) thick.
- Kwk** Wahweap and Kaiparowits(?) Formations, undivided - Upper part is orangish-gray, fine-grained, in part salt-and-pepper gray sandstone with some thin lenticular beds of granules and small chert pebbles. Lower part is alternating yellowish-gray and yellowish-brown, fine-grained sandstone and gray and grayish-red-purple mudstone beds at a ratio of 1:1. Unconformity on top. About 600 to 750 feet (180-230 m) thick.
- Ksd** Drip Tank Member of the Straight Cliffs Formation - Massive, white to light-gray sandstone. Upper two-thirds of unit contains prominent conglomerate beds of granule-sized quartz and pebbles of chert. Casts of logs are locally common. 150 to 180 feet (45-55 m) thick.
- Ksj** John Henry Member of the Straight Cliffs Formation - Alternating sandstone and mudstone beds, with a sandstone-to-mudstone ratio of 2:1. Sandstones are grayish-orange, very fine- to fine-grained and cross-bedded. Mudstones are gray and pale-red-purple. 550 to 650 feet (170-200 m) thick.
- Kss** Smoky Hollow Member of the Straight Cliffs Formation - Upper part is a distinctive, white to grayish-orange sandstone containing quartz granules, and chert and quartzite pebbles (calico bed). Middle part is orangish-gray, fine-grained sandstone and gray mudstone. Lower part is predominantly gray mudstone, with a thin, persistent, carbonaceous shale in base. Unconformity between middle and upper parts. 125 to 140 feet (40-45 m) thick.
- Kst** Tibbet Canyon Member of Straight Cliffs Formation - Prominent orangish-gray, massive, cliff-forming sandstone. Upper part is cross-bedded and contains abundant oyster shells. 100 to 125 feet (30-40 m) thick.
- Kt** Tropic Shale - Medium-brownish-gray, very thin-bedded, non-resistant silty shale. Upper part has interbeds of fine-grained sandstone and siltstone from interfingering with overlying unit. Base is not exposed in the quadrangle. About 700 feet (210 m) thick.

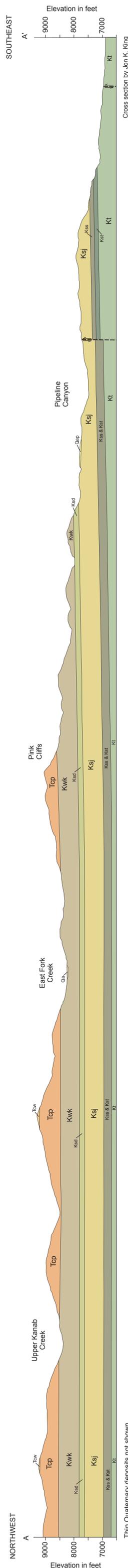
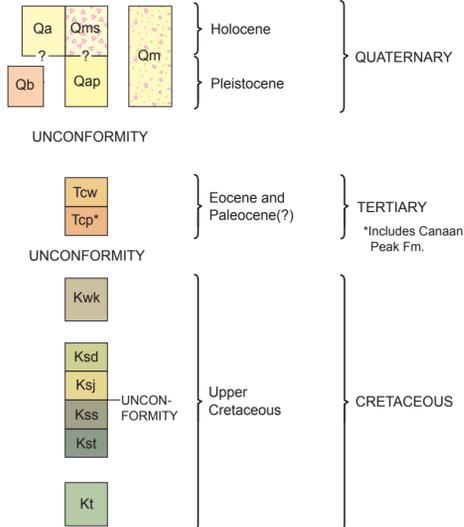
Map Symbols

- Contact, dashed where approximately located
- Normal Fault, dashed where approximately located or inferred, dotted where concealed; ball and bar on down-thrown side; arrows on cross section show offset
- Strike and dip of bedding
- Strike of vertical joint
- A**—**A'** Line of cross section
- Approximate line of measured section (appendix)

Lithologic Column



Correlation of Map Units



Cross section by Jon K. King

Thin Quaternary deposits not shown